



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re Application of:

Applicant: : Allan Wirth  
Serial No. : 10/647,908  
Filing Date : August 25, 2003  
Title of Invention : METHOD AND APPARATUS FOR WAVEFRONT  
MEASUREMENT THAT RESOLVES THE  $2\pi$  AMBIGUITY IN  
SUCH MEASUREMENT AND ADAPTIVE OPTICS  
SYSTEMS UTILIZING SAME  
Examiner : Stephone B. Allen  
Group Art Unit : 2878  
Attorney Docket No. : 108-133USANA0

Honorable Commissioner of  
Patents and Trademarks  
Washington, D.C. 20231

**TERMINAL DISCLAIMER (37 CFR 1.321(b))**

SIR:

Your Petitioner, Adaptive Optics Associates, Inc., represents that it is the sole owner of the entire interest of the above-identified application.

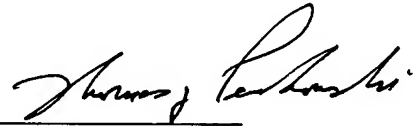
Your Petitioner hereby disclaims the terminal period of any patent issuing on the above-referenced application that would extend beyond the expiration of the full statutory term of U.S. Patent No. 6,649,895, and hereby agree that any patent so granted on the above-identified application shall be enforceable only for and during such period that the legal title to such patent is the same as the legal title to U.S. Patent Nos. 6,609,794 and 6,572,230, and that this agreement shall run with any patent so granted on the above-referenced application, and shall be binding upon the grantor, its successors, and assigns.

Your Petitioner does not disclaim any terminal part of any patent granted on the above-referenced application prior to the expiration date of the full statutory term of said U.S. Patent No. 6,649,895 in the event that such patent later: expires for failure to pay a maintenance fee; is held unenforceable; is found invalid; is statutorily disclaimed in whole or terminally disclaimed under 37 C.F. R. Section 1.321(c); has all claims canceled by a reexamination certificate; or is otherwise terminated prior to the expiration of its full statutory term, except for a separation of legal title as stated above.

This Terminal Disclaimer is being signed under the provisions of 37 C.F.R. Section 1.321(b)(1)(iv). Enclosed in payment of the requisite fee of \$130.00 is Thomas J Perkowski, Esq. PC Check No. 5189. The Commissioner is hereby authorized to charge any fee deficiencies to Deposit Account 16-1340.

Respectively submitted,

Dated: September 22, 2005

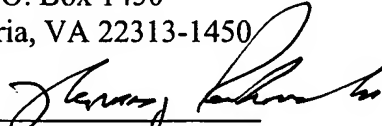


Thomas J. Perkowski, Esq.  
Reg. No. 33,134  
Attorney for Applicant  
Thomas J. Perkowski, Esq., P.C.  
Soundview Plaza  
1266 East Main Street  
Stamford, Connecticut 06902  
203-357-1950  
<http://www.tjpatlaw.com>

CERTIFICATE OF FIRST CLASS MAIL  
UNDER 37 CFR 1.08

I hereby certify that this correspondence  
is being deposited with the United States Postal Service  
on September 22, 2005, as First Class Mail,  
in a prepaid postage envelope  
addressed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450



Thomas J. Perkowski, Esq.  
Dated: September 22, 2005



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re Application of:

Applicant: : Allan Wirth  
Serial No. : 10/647,908  
Filing Date : August 25, 2003  
Title of Invention : METHOD AND APPARATUS FOR WAVEFRONT  
MEASUREMENT THAT RESOLVES THE  $2\pi$  AMBIGUITY IN  
SUCH MEASUREMENT AND ADAPTIVE OPTICS  
SYSTEMS UTILIZING SAME  
Examiner : Stephone B. Allen  
Group Art Unit : 2878  
Attorney Docket No. : 108-133USANA0

Honorable Commissioner of  
Patents and Trademarks  
Washington, D.C. 20231

**CERTIFICATE UNDER 37 C.F.R §3.73(b)**

SIR:

Adaptive Optics Associates, Inc. a corporation of Massachusetts, certifies that it is the Assignee of the entire right, title, and interest in the patent application identified above by virtue of the Assignments recorded in the prior Application in the USPTO on February 27, 2001 at Reel 11557 and Frames 793-796, and on July 11, 2003 at Reel 13790 and Frames 707-711. Copies of the Assignment documents are enclosed herewith.

Adaptive Optics Associates, Inc. also certifies that it is the Assignee of the entire right, title, and interest in U.S. Patent No. 6,649,895 by virtue of the Assignments recorded in the USPTO on October 26, 2001 at Reel 12371 and Frames 396-399, and on July 11, 2003 at Reel 13790 and Frames 626-630. Copies of the Assignment documents are enclosed herewith.

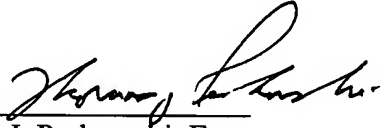
The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the Assignee identified above.

The undersigned, whose title is supplied below, is empowered to act on behalf of the Assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectively submitted,

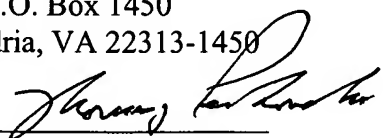
Dated: September 22, 2005

  
Thomas J. Perkowski, Esq.  
Reg. No. 33,134  
Attorney for Assignee of Record  
Thomas J. Perkowski, Esq., P.C.  
Soundview Plaza  
1266 East Main Street  
Stamford, Connecticut 06902  
203-357-1950  
<http://www.tjpatlaw.com>

CERTIFICATE OF FIRST CLASS MAIL  
UNDER 37 CFR 1.08

I hereby certify that this correspondence  
is being deposited with the United States Postal Service  
on September 22, 2005, as First Class Mail,  
in a prepaid postage envelope  
addressed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

  
Thomas J. Perkowski, Esq.  
Dated: September 22, 2005

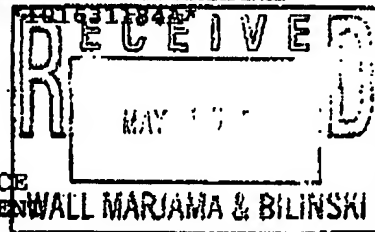


UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

MAY 11, 2001

PTAS

WALL MARJAMA & BILINSKI  
CHRISTOPHER R. PASTEL  
101 SOUTH SALINA STREET, SUITE 400  
SYRACUSE, NY 13202



UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/27/2001

REEL/FRAME: 011557/0793

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

## ASSIGNOR:

WIRTH, ALLAN

DOC DATE: 02/08/2001

## ASSIGNEE:

METROLOGIC INSTRUMENTS, INC.  
90 COLES ROAD  
BLACKWOOD, NEW JERSEY 08012

SERIAL NUMBER: 09766211

FILING DATE: 01/19/2001

PATENT NUMBER:

ISSUE DATE:

STEVEN POST, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed and will not execute, any agreement in conflict herewith.

6) The undersigned hereby grant(s) Christopher R. Pastel, of WALL MARJAMA & BILINSKI the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office recordation of this document.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date 8 Feb 2001 Signature Allan Wirth (SEAL)  
Allan Wirth

Date \_\_\_\_\_ Signature \_\_\_\_\_ (SEAL)

Date \_\_\_\_\_ Signature \_\_\_\_\_ (SEAL)

Date February 8, 2001 Signature Richard B. Dhillon (SEAL)  
my commission expires Nov. 16, 2001

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. or (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date \_\_\_\_\_ Witness \_\_\_\_\_

Date \_\_\_\_\_ Witness \_\_\_\_\_

## ASSIGNMENT

(1-8) Insert Name(s) of Inventor(s)

(1) Allan Wirth (5) \_\_\_\_\_  
(2) \_\_\_\_\_ (6) \_\_\_\_\_  
(3) \_\_\_\_\_ (7) \_\_\_\_\_  
(4) \_\_\_\_\_ (8) \_\_\_\_\_

In consideration of the sum of dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to

(9) Insert name of Assignee

(9) Metrologic Instruments, Inc.

(10) Insert address of Assignee

(10) 90 Coles Road, Blackwood, NJ 08012

(hereinafter designated as the Assignee) the entire right, title and interest for the United States, its territories, dependencies and possessions, in the invention, and all applications for patent and any Letters Patent which may be granted therefor, known as

(11) Insert Identification of Invention,  
such as Title, Case Number or  
Foreign Application Number

(11) DISPERSED HARTMANN SENSOR AND METHOD FOR  
MIRROR SEGMENT ALIGNMENT AND PHASING  
(Case No. 948 001)

for which the undersigned have executed an application for patent in the United States of America

(12) Insert Date of Signing of  
Application

(12) on \_\_\_\_\_

(13) Alternative identification

(13) U.S. Application(s) Serial Number(s) 09/766,211  
for filed application(s) filed January 19, 2001

1) The undersigned agree(s) to execute all papers necessary in connection with the application and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

JULY 11, 2003

PTAS

THOMAS J. PERKOWSKI  
SOUNDVIEW PLAZA  
1266 EAST MAIN STREET  
STAMFORD, CT 06902

**\*700036049A\***

\*700036049A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/11/2003

REEL/FRAME: 013790/0707  
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

METROLOGIC INSTRUMENTS INC.

DOC DATE: 07/09/2003

ASSIGNEE:

ADAPTIVE OPTICS ASSOCIATES, INC.  
10 WILSON ROAD  
CAMBRIDGE, MASSACHUSETTS 02138

SERIAL NUMBER: 09766211

FILING DATE: 01/19/2001

PATENT NUMBER:

ISSUE DATE:

JEFFREY OLSEN, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

Attorney Docket: 108-122USA000

**PATENT ASSIGNMENT**

For value received I, C. Harry Knowles, Chief Executive Officer of Metrologic Instruments, Inc., hereby sell, assign and transfer to Adaptive Optics Associates, Inc., a corporation of Massachusetts, having a place of business at 10 Wilson Road, Cambridge, Massachusetts, 02138, as assignee, and its successors, assigns and legal representatives, the entire rights, title and interest, for all countries in and to certain inventions disclosed in U.S. Application Serial No. 09/766,211 entitled "DISPERSED HARTMANN SENSOR AND METHOD FOR MIRROR SEGMENT ALIGNMENT AND PHASING", filed January 19, 2001, for Letters Patent of the United States, and all the rights and privileges under any and all Letters Patent that may be granted therefor.

I request that any and all patents for said invention be issued to said assignee, its successors, assigns and legal representatives, or to such nominees as it may designate.


I agree that, when requested, I will, without charge to said assignee but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in said assignee, its successors, assigns and legal representatives or nominees.

I authorize and empower said assignee, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said invention filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the said assignee or nominee to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

I covenant with said assignee, its successors, assigns and legal representatives, that the rights and property herein conveyed are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Signed at Blackwood, New Jersey  
this 9 day of July, 2003

 (L.S.)

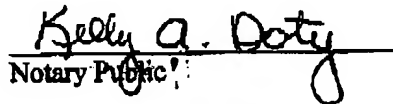
C. Harry Knowles, Chief Executive Officer  
Metrologic Instruments, Inc.

State of New Jersey )

) ss:

County of Camden )

This day before me personally appeared C. HARRY KNOWLES, who acknowledged the foregoing instrument and subscribed by him to be his free act and deed.

  
Notary Public

KELLY A. DOTY  
Notary Public of New Jersey  
Commission Expires Jan 21, 2007



UNITED STATES  
PATENT AND  
TRADEMARK OFFICE

FEBRUARY 07, 2002

PTAS

THOMAS J. PERKOWSKI, ESQ., P.C.  
THOMAS J. PERKOWSKI, ESQ.  
SOUNDVIEW PLAZA  
1266 E. MAIN ST.  
STAMFORD, CT 06902

Under Secretary of Commerce For Intellectual Property and  
Director of the United States Patent and Trademark Office  
Washington, DC 20231  
www.uspto.gov



\*101922246A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/26/2001

REEL/FRAME: 012371/0396  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

WIRTH, ALLAN

DOC DATE: 10/10/2001

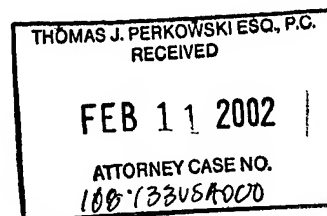
ASSIGNEE:

METROLOGIC INSTRUMENTS, INC.  
90 COLES ROAD  
BLACKWOOD, NEW JERSEY 08012

SERIAL NUMBER: 09906388  
PATENT NUMBER:

FILING DATE: 07/16/2001  
ISSUE DATE:

MARCUS KIRK, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



**PATENT ASSIGNMENT**

For value received I, Allan Wirth, hereby sell, assign and transfer to Metrologic Instruments, Inc., a corporation of New Jersey; having a place of business at 90 Coles Road, Blackwood, New Jersey, 08012, as assignee, and its successors, assigns and legal representatives, the entire rights, title and interest, for all countries in and to certain inventions disclosed in U.S. Application Serial No. 09/906,388 entitled "METHOD AND APPARATUS FOR WAVEFRONT MEASUREMENT THAT RESOLVES THE 2- $\pi$  AMBIGUITY MEASUREMENT AND ADAPTIVE OPTICS SYSTEMS UTILIZING SAME", filed July 16, 2001, for Letters Patent of the United States, and all the rights and privileges under any and all Letters Patent that may be granted therefor.

I request that any and all patents for said invention be issued to said assignee, its successors, assigns and legal representatives, or to such nominees as it may designate.

I agree that, when requested, I will, without charge to said assignee but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in said assignee, its successors, assigns and legal representatives or nominees.

I authorize and empower said assignee, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said invention filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the said assignee or nominee to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

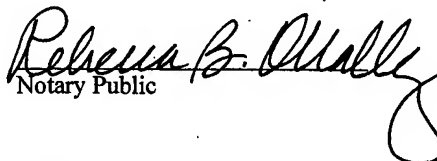
I covenant with said assignee, its successors, assigns and legal representatives, that the rights and property herein conveyed are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Cambridge  
Signed at Bedford, Massachusetts  
this 10 day of October, 2001.

 (L.S.)  
Allan Wirth

State of Massachusetts     )  
  ) ss: Cambridge  
County of Middlesex     )

This day before me personally appeared Allan Wirth, who acknowledged the foregoing instrument and subscribed by him to be his free act and deed.

  
Notary Public



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

JULY 11, 2003

PTAS

THOMAS J. PERKOWSKI, ESQ.  
THOMAS J. PERKOWSKI, ESQ., P.C.  
SOUNDVIEW PLAZA  
1266 EAST MAIN ST.  
STAMFORD, CT 06902

**\*700036043A\***

\*700036043A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/11/2003

REEL/FRAME: 013790/0626

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

METROLOGIC INSTRUMENTS, INC.

DOC DATE: 07/09/2003

ASSIGNEE:

ADAPTIVE OPTICS ASSOCIATES, INC.  
10 WILSON ROAD  
CAMBRIDGE, MASSACHUSETTS 02138

SERIAL NUMBER: 09906388

FILING DATE: 07/16/2001

PATENT NUMBER:

ISSUE DATE:

PAULA MCCRAY, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

**PATENT ASSIGNMENT**

For value received I, C. Harry Knowles, Chief Executive Officer of Metrologic Instruments, Inc., hereby sell, assign and transfer to Adaptive Optics Associates, Inc., a corporation of Massachusetts, having a place of business at 10 Wilson Road, Cambridge, Massachusetts, 02138, as assignee, and its successors, assigns and legal representatives, the entire rights, title and interest, for all countries in and to certain inventions disclosed in U.S. Application Serial No. 09/906,388 entitled "METHOD AND APPARATUS FOR WAVEFRONT MEASUREMENT THAT RESOLVES THE  $2\pi$  AMBIGUITY IN SUCH MEASUREMENT AND ADAPTIVE OPTICS SYSTEMS UTILIZING SAME", filed July 16, 2001, for Letters Patent of the United States, and all the rights and privileges under any and all Letters Patent that may be granted therefor.

I request that any and all patents for said invention be issued to said assignee, its successors, assigns and legal representatives, or to such nominees as it may designate.


I agree that, when requested, I will, without charge to said assignee but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in said assignee, its successors, assigns and legal representatives or nominees.

I authorize and empower said assignee, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said invention filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the said assignee or nominee to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

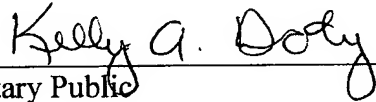
I covenant with said assignee, its successors, assigns and legal representatives, that the rights and property herein conveyed are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Signed at Blackwood, New Jersey  
this 9 day of July, 2003

  
\_\_\_\_\_(L.S.)  
C. Harry Knowles, Chief Executive Officer  
Metrologic Instruments, Inc.

State of New Jersey       )  
                                      ) ss:  
County of Camden       )

This day before me personally appeared C. HARRY KNOWLES, who acknowledged the foregoing instrument and subscribed by him to be his free act and deed.

  
\_\_\_\_\_  
Notary Public

**KELLY A. DOTY**  
Notary Public of New Jersey  
Commission Expires Jan 21, 2007

**IN THE UNITED STATES PATENT & TRADEMARK OFFICE**

In re Application:

|                    |   |   |
|--------------------|---|---|
| Applicant          | : | Allan Wirth   |
| Application No     | : | 09/906,388  |
| Filed              | : | July 16, 2001   |
| Title of Invention | : | METHOD AND APPARATUS FOR WAVEFRONT<br>MEASUREMENT THAT RESOLVES THE $2\pi$ AMBIGUITY IN<br>SUCH MEASUREMENT AND ADAPTIVE OPTICS SYSTEMS<br>UTILIZING SAME |
| Assignee           | : | Metrologic Instruments, Inc.  |
| Attorney Docket No | : | 108-133USA000   |
| Examiner           | : | Stephone Allen  |
| Group Art Unit     | : | 2878  |

**CERTIFICATE UNDER 37 C.F.R. § 3.73(b)**

Sir:

As an authorized officer of Metrologic Instruments, Inc., I, C. Harry Knowles, hereby certify that Metrologic Instruments, Inc., is the Assignee of the entire right, title and interest in the Patent Application identified above by virtue of the Assignment from the inventor of the Patent Application identified above, which Assignment was executed October 10, 2001, and recorded in the Patent and Trademark Office on October 26, 2001 at Reel 12371/ Frames 396-399. A copy of the Recorded Assignment is attached hereto.

I have reviewed all the documents in the chain of title of the Patent Application identified above and, to the best of my knowledge and belief, title is in the Assignee identified above.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: July 9, 2003



C. Harry Knowles, Chief Executive Officer  
Metrologic Instruments, Inc.  
Assignee of Record